

IN THE CLAIMS:

1-22. (Cancelled)

23. (Currently Amended) A system for processing semiconductor substrates comprising:

a chamber comprising at least one substrate transfer passage formed in the chamber and a slit valve adapted to selectively seal the transfer passage;

a robot adapted for substrate transfer, the robot being disposed within the chamber and having an end effector; and

a gripper assembly coupled to the robot and configured to retain a circular semiconductor substrate on the end effector, the gripper assembly being mechanically actuatable by a structure remote from the robot and end effector during substrate transfer; wherein the gripper assembly comprises:

at least two rotatable jaws, one jaw being positioned laterally on either side of the robot end effector;

a mounting bracket adapted for mounting each of the at least two jaws to a portion of the robot end effector; and

a biasing member disposed between each of the at least two jaws and the mounting brackets, adapted for urging the at least two jaws to rotate about an axis substantially normal to the robot end effector;

wherein the system further comprises:

a striker plate positioned adjacent the transfer passage to engage the gripper assembly as the end effector is moved through the passage, the striker plate being positionable along a direction defined by an axis of extension of the end effector through the passage; and

a mounting block coupled to at least one of the chamber and slit valve, the block having a threaded hole for receiving a stud extending from the striker plate.

24. (Cancelled)

25. (Currently Amended) The system of claim ~~[[24]]~~ 23, wherein each of the at least two jaws comprises:

a base portion coupled directly to the mounting bracket, the base portion having a first end and a second end;

an arm coupled at a first end to the first end of the base portion and extending outwardly therefrom;

a striker coupled to the second end of the base portion and extending therefrom at an angle substantially normal to the base portion; and

a gripper coupled to a second end of the arm.

26. (Previously Presented) The system of claim 25, wherein the jaws are adapted to rotate outward relative to the robot end effector upon contact of the striker with the structure remote from the robot.

27. (Original) The system of claim 25, wherein the gripper comprises:

a shaft having a first end coupled to the second end of the arm and extending outwardly therefrom at an angle substantially normal to the arm; and

a disk supported for rotation upon a second end of the shaft.

28. (Original) The system of claim 27 further comprising:

a bearing disposed between the shaft and disk.

29. (Original) The system of claim 25, wherein the striker comprises:

a shaft projecting from the base portion at an angle substantially normal to the base portion; and

a sleeve coupled to the shaft and adapted to rotate about a longitudinal axis of the shaft.

30. (Original) The system of claim 29 further comprising:

a bearing disposed between the shaft and sleeve.

31-33. (Cancelled)

34. (Previously Presented) The system of claim 23, wherein the structure for actuating the gripper is at least one of the chamber or a slit valve disposed in the chamber.

35-37. (Cancelled)

38. (Currently Amended) The system of claim [[37]] 23 further comprising:
a locking mechanism for fixing the engagement of the stud and the threaded hole.

39-41. (Cancelled)

42. (Currently Amended) The system of claim [[39]] 23, wherein each of the at least two rotatable jaws [[the jaw]] further comprises:

a base portion having a first end and a second end, the base portion pivotably coupled to the mounting bracket between the first and second ends;

a pivot hole disposed through the first end of the base portion; and

a pin disposed through the pivot hole and coupling the jaw to the mounting bracket.

43-47. (Cancelled)

48. (Currently Amended) The system of claim [[47]] 23, wherein the mounting bracket further comprises:

a first pin extending outwardly from the mounting bracket; and

a second pin extending outwardly from the mounting bracket, the jaw separating the first and second pins, wherein a position of at least one of the pins is adjustable to limit the displacement of the jaw.

49-61. (Cancelled)